

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.-3. (canceled)

4. (new) A piston/cylinder unit for a high pressure pump, comprising:

a housing defining a pump cylinder;

a piston arranged in said pump cylinder and having a first end defining a head region of said piston and a second end opposing said first end;

a controlled drive acting on said second end of said piston configured to oscillate said piston in said cylinder through a suction stroke and a compression stroke;

a conveying flow inlet connected to said cylinder; and

a conveying valve, wherein a fluid is drawn into said cylinder through said conveying flow inlet during the suction stroke and a pressure of the fluid in said cylinder is increased during the compression stroke for feeding the fluid through said conveying valve, and

wherein said piston comprises a first centering cone at said head region comprising a truncated cone having a circular base area and a top area, wherein a ratio of a maximum half diameter reduction of said first centering cone with respect to the diameter of said piston is approximately 1:200 and a ratio of the axial length of said first centering cone to the length of said piston is approximately 1:6.6.

5. (new) The piston/cylinder unit of claim 4, further comprising a bevel comprising a second centering cone positioned on said first centering cone, wherein a distance between a center axis of said first centering cone and a center axis of said second centering cone has a maximum tolerance of 1 μ m.

6. (new) The piston/cylinder unit of claim 4, wherein said piston/cylinder unit is an injection pump for a common rail fuel injection system of a motor vehicle, and wherein said controlled drive comprises a camshaft acting on said second end of said piston and a spring urging said piston out of said cylinder, said fuel comprising a fuel for an internal combustion engine.